Notes on Medicinal Plants.

The various "Loco-weeds," *Astragalus molissimus*, Torr., *A. lentiginosus*, Dougl., *A. Mortoni*, Nutt., and other species of *Astragalous*, with *Oxytropus Lamberti*, Pursh, have periodically attracted notice in the medical press for many years. Of late they have received considerable attention from experimenters. The Homœopathic Recorder, in its issue of September last, devotes eleven pages to a detailed account of experiments made with the homœopathic preparations of *O. Lamberti*, under the direction of Prof. Wm. S. Gee, by five of his students, covering a period of nearly three weeks. From the very first, an infinity of symptoms were noted. We remember once taking, while collecting in central Arizona, at a single experimental dose, many times more than all these experimenters took in the course of the entire three weeks, but without result except a slight nausea, due to the unpleasant taste of the plant. Studies made at the University of Pennsylvania have failed to find in the plants any poisonous principle whatever, though it is admitted that their long continued and excessive consumption produces important destructive mental, followed by nutritive, changes in stock.

Prof. Nagai, of Japan, reports the discovery in *Ephedra vulgaris*, Rich., of the alkaloid Ephedrin, which is an efficient mydriatic. The American species are now being examined for the presence of this compound.

A new anthelmintic is the Mysinaceous plant *Embelia Ribes*, Burm., of the East Indies.

Lallemantia Iberica, F. & M., a very near relation of *Cedronella*, indigenous in Asia Minor, seems likely to become an important source of a new commercial oil.

The Magnoliaceæ are furnishing the market with a new febrifuge bark from *Michelia Nilagirica*, Zenk., of India.

The *Anchietea salutaris*, St. Hil., a violaceous vine of Brazil, whose properties have long been known to the aborigines of its own country, is attracting some attention in Europe, in the treatment of diseases of mucous membranes.

A species of *Pterocarpus*, described by Aublet as *Vatairea Guianensis*, is found to be of service in skin diseases. It would

now be of great interest to secure satisfactory specimens of this plant, in order that the doubt concerning its classification might be set at rest.

Announcement of the A. A. A. S. Committee on a Botanical Exchange.

To the Members of the Botanical Club of the A. A. A. S.:

Your committee, appointed in August last to devise a method for the exchange of specimens among American botanists, have, after consultation with other botanists, decided that the most practical method is through the herbarium of the Department of Agriculture, at Washington.

A classified stock of duplicates belonging to the Department is available as a basis of an exchange herbarium.

Those desiring to exchange specimens should address, for rules and other information, Dr. Geo. Vasey, U. S. Department of Agriculture, Washington, D. C.

GEO. VASEY, N. L. BRITTON,
SERENO WATSON, B. D. HALSTED,
THOMAS MORONG, Committee.

Reviews of Foreign Literature.

Experimentelle Untersuchung über das Wachsthum der Zellmembran. By F. Noll. (Abhandlung der Senckenbergerischen Naturforschenden Gesellschaft, Bd. xv, 1887.)

A short review of this paper, describing some interesting experiments in respect to the manner of growth of cell membrane, is given in the Centralblatt, Vol. 33, No. 4, 1888. The following is a brief abstract of the review:

The author first gives a historical sketch of the opinions held, at different times, of the manner of growth of the cell membrane. The first generally adopted theory was that of growth by apposition. Naegeli, in his work on starch grains, almost entirely overthrew this theory, establishing in its place that of intussusception. Gradually doubts arose regarding this mode of growth and the opposition theory gained new adherents, until at the present time the two theories stand opposed to each other, and the question is left for future investigators to decide.

The author undertakes to solve the question experimentally, by causing a difference in color between the old and new growth of membrane. As the new membrane will not take up aniline or similar coloring stuff, the old membrane was colored and the new left colorless. The method used has already been successful in solving questions in animal physiology. Living specimens